What is claimed is:

1. An optical fiber cable, comprising:

a buffer tube;

an optical unit disposed in the buffer tube, the optical unit including at least one optical fiber; and

at least first and second gel layers interposed between the buffer tube and the optical unit, wherein the first and second gel layers have different rheological properties.

2. The optical fiber cable of claim 1, wherein the different rheological properties of the first and second gel layers include at least one of viscosity and yield stress.

3. The optical cable of claim 2, wherein the first gel layer surrounds the optical unit, the second gel layer surrounds the first gel layer, the first gel layer is formed of a first material which is compatible with a material of the optical unit, and the second gel layer is formed of a material which is compatible with a material of the buffer tube.

4. The optical cable of claim 2, wherein the first gel layer surrounds the optical unit, the second gel layer surrounds the first gel layer, and the viscosity of the first gel layer is less than the viscosity of the second gel layer.

5. The optical cable of claim 4, wherein the viscosity of the first gel layer is less than 20,000 cps at 23°C.

6. The optical cable of claim 4, wherein the viscosity of the second gel layer is greater than 40,000 cps at 23°C.

7. The optical cable of claim 4, wherein the viscosity of the first gel layer is less than 20,000 cps at 23°C and the viscosity of the second gel layer is greater than 40,000 cps at 23°C.

8. The optical cable of claim 2, wherein the first gel layer surrounds the optical unit, the second gel layer surrounds the first gel layer, and the yield stress of the first gel layer is less than the yield stress of the second gel layer.

9. The optical cable of claim 8, wherein the yield stress of the first gel layer is less than 20 Pa at 70°C.

10. The optical cable of claim 8, wherein the yield stress of the second gel layer is greater than 50 Pa at 70°C.

11. The optical cable of claim 8, wherein the yield stress of the second gel layer is greater than 100 Pa at 70°C.

12. The optical cable of claim 8, wherein the yield stress of the first gel layer is less than 20 Pa at 70°C and the yield stress of the second gel layer is greater than 50 Pa at 70°C.

13. The optical cable of claim 2, wherein the first gel layer surrounds the optical unit, the second gel layer surrounds the first gel layer, and the viscosity and the yield stress of the first gel layer are less than the viscosity and the yield stress of the second gel layer.

14. The optical cable of claim 13, wherein the viscosity of the first gel layer is less than 20,000 cps at 23°C, the viscosity of the second gel layer is greater than 40,000 cps at 23°C, the yield stress of the first gel layer is less than 20 Pa at 70°C and the yield stress of the second gel layer is greater than 50 Pa at 70°C.

15. The optical cable of claim 13, wherein the viscosity of the first gel layer is less than 20,000 cps at 23°C, the viscosity of the second gel layer is greater than 40,000 cps at 23°C, the yield stress of the first gel layer is less than 20 Pa and the yield stress of the second gel layer is greater than 100 Pa at 70°C.

16. The optical cable of claim 13, wherein the first gel layer is formed of a first material which is compatible with a material of the optical unit and the second gel layer is formed of a material which is compatible with a material of the buffer tube.

17. The optical cable of claim 2, wherein the first gel layer is adapted to maintain the optical unit in an axial center position of the buffer tube.

18. The optical cable of claim 3, wherein each of the first and second gel layers comprises a thickening agent and at least one of a polyolefin oil and a polybutene oil.

19. The optical cable of claim 18, wherein the thickening agent of the first gel layer comprises a polymeric thickening agent of less than about 10 weight percent or a pyrogenic thickening agent of less than about 8 weight percent.

20. The optical cable of claim 18, wherein the thickening agent of the second gel layer comprises a polymeric thickening agent of greater than about 10 weight percent or a pyrogenic thickening agent of greater than about 8 weight percent.

21. The optical cable of claim 18, wherein the thickening agent of the first gel layer comprises a polymeric thickening agent of less than about 10 weight percent or a pyrogenic thickening agent of less than about 8 weight percent, and the thickening agent of the second gel layer comprises a polymeric thickening agent of greater than about 10 weight percent or a pyrogenic thickening agent of greater than about 8 weight percent.

22. The optical cable of claim 3, wherein each of the first and second gel layers comprises a silicone material.

23. The optical cable of claim 3, wherein the second gel layer comprises a cross-linked material.

24. An optical fiber cable, comprising:

a buffer tube;

an optical unit disposed in the buffer tube, the optical unit including at least one optical fiber; and

a plurality of gel layers interposed between the buffer tube and the optical unit, wherein gel layers have different rheological properties including at least one of viscosity and yield stress.

25. The optical fiber cable of claim 24, wherein a first gel layer surrounds the optical unit, the second gel layer surrounds the first gel layer, and the viscosity of the first gel layer is lower than the viscosity of the second gel layer.

26. The optical fiber cable of claim 24, wherein a first gel layer surrounds the optical unit, the second gel layer surrounds the first gel layer, and the yield stress of the first gel layer is lower than the yield stress of the second gel layer.

27. The optical cable of claim 24, wherein a first gel layer surrounds the optical unit and is formed of a first material which is compatible with a material of the optical unit, and a second gel layer surrounds the first gel layer and is formed of a material which is compatible with a material of the buffer tube.

28. An optical fiber cable, comprising:

an optical unit disposed, the optical unit including at least one optical fiber; and

a first gel layer disposed around the optical unit; and

a second gel layer disposed around the first gel layer, wherein the first and second gel layers have different rheological properties including at least one of viscosity and yield stress.

29. The optical fiber cable of claim 28, wherein the viscosity of the first gel layer is lower than the viscosity of the viscosity of the second gel layer.

30. The optical fiber cable of claim 28, wherein the yield stress of the first gel layer is lower than the yield stress of the second gel layer.

31. The optical cable of claim 28, wherein the viscosity and the yield stress of the first gel layer are less than the viscosity and the yield stress of the second gel layer.